

The M-Hull



The Venice Challenge

- Chuck Robinson
- ACTV in Venice
- Wave Damage



M-Hull Development

- Computer Design
- Model Testing
- 23-Foot Prototype

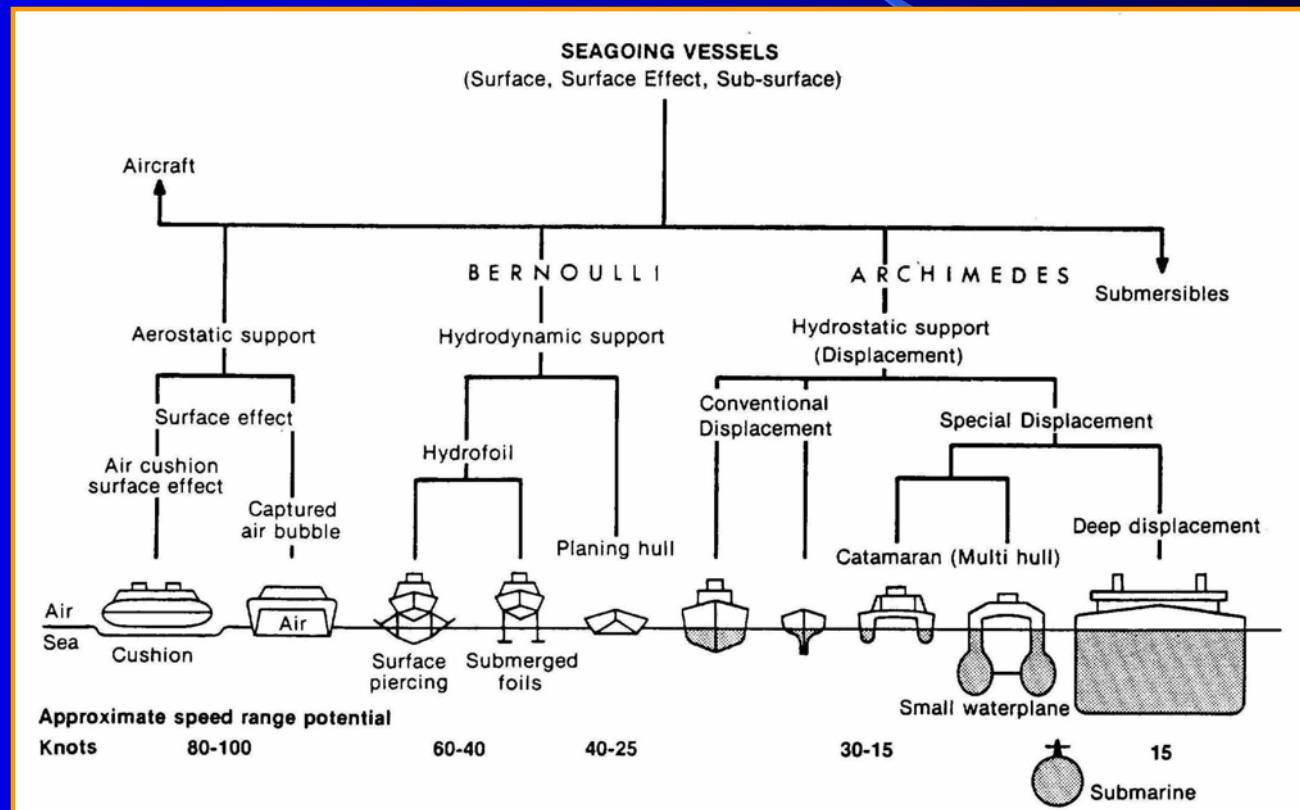


Vaporetto Mangia Onda

- Low Wash
- High Efficiency
- MARAD



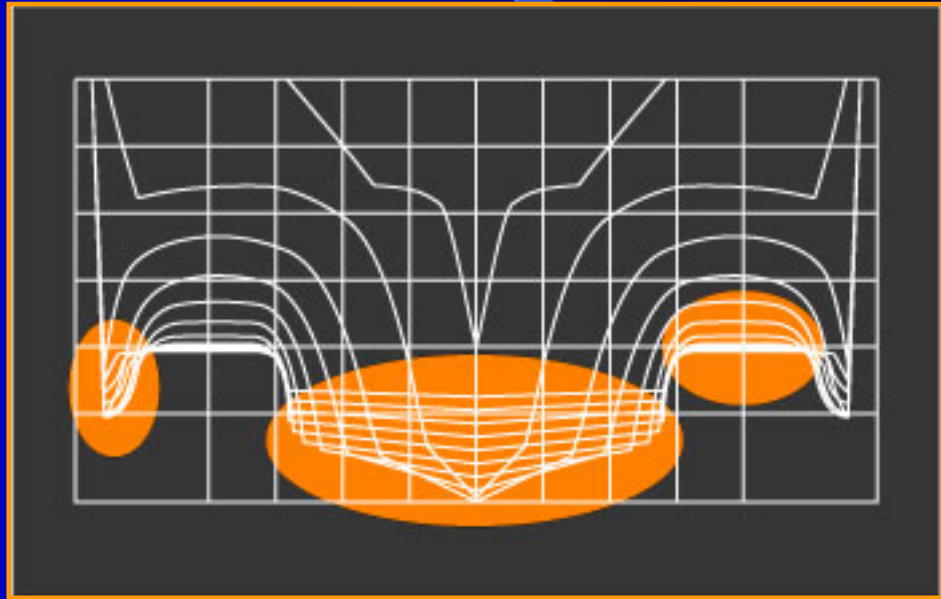
Conventional Hull Forms



Source: Naval Institute Press

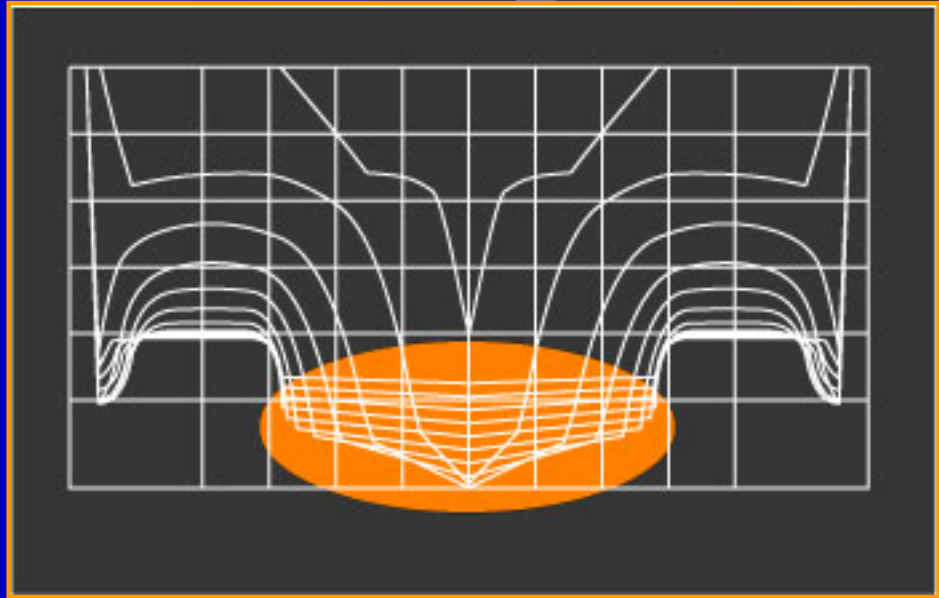
Hull Geometry

- Central Hull
- Planing Tunnels
- The Skirts



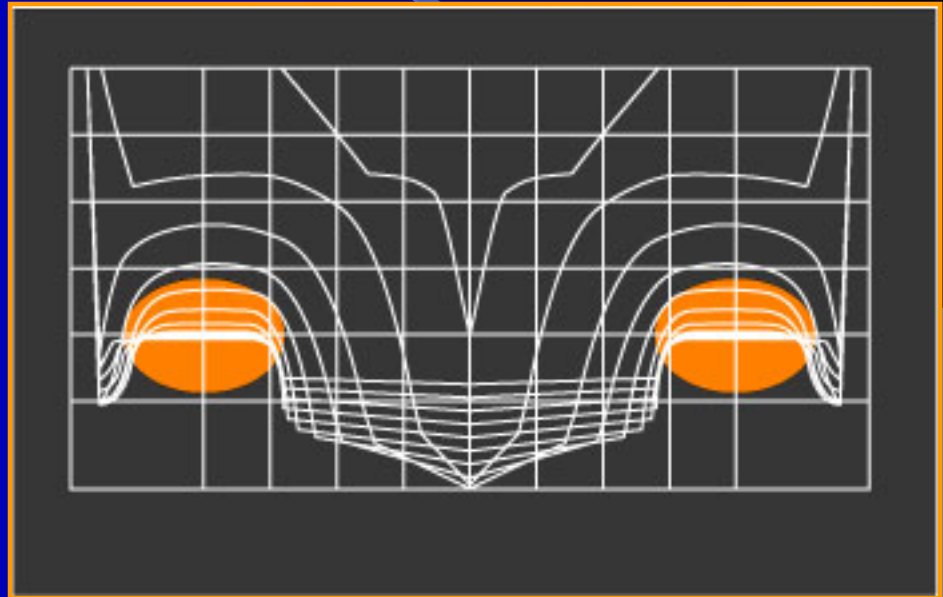
Central Displacement Hull

- Static Support
- Fine Entry
- Load Capacity



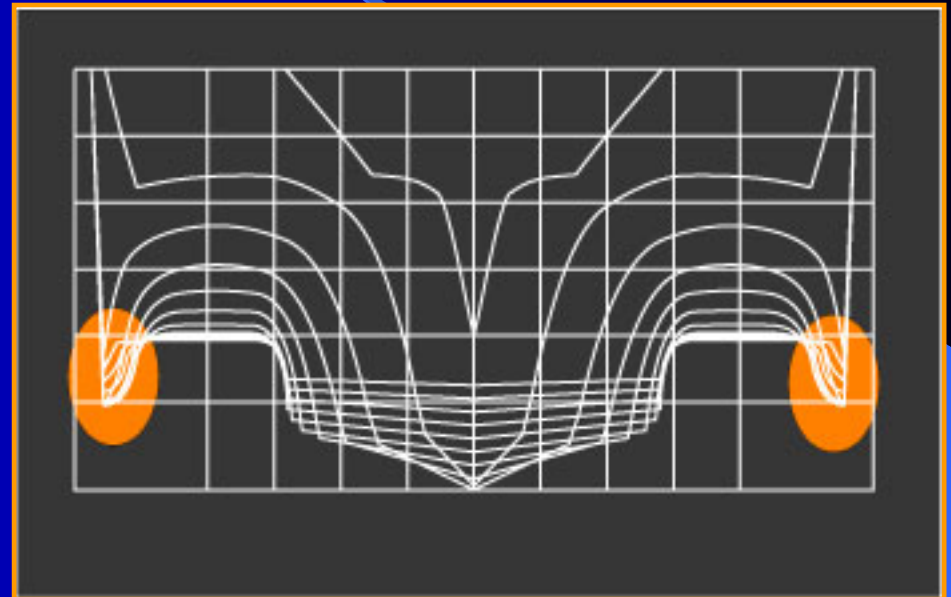
The Planing Tunnels

- Hydrodynamic Lift
- Aerodynamic Lift
- Aeration of Water
- Optimum Planing

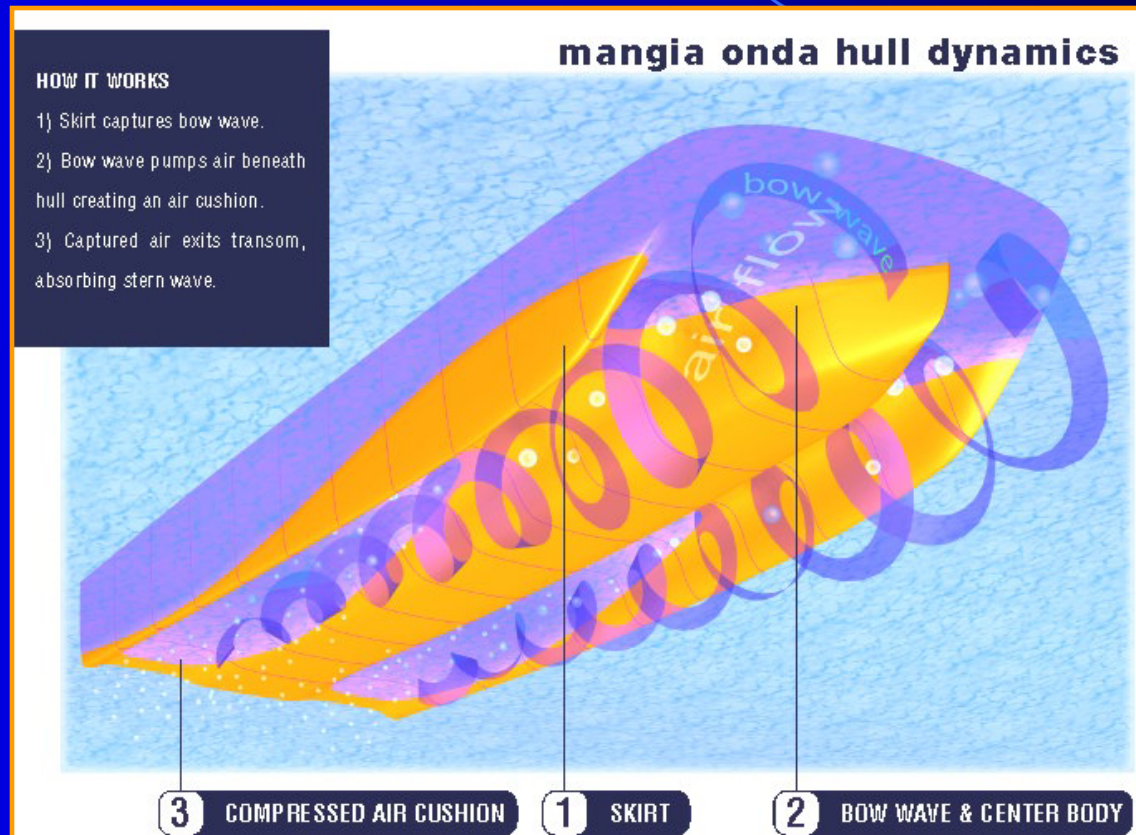


The Skirts

- Contain Bow Wave
- Create Surface Effect
- Additional Stability



Hull Dynamics



In Action!!!



Current Status

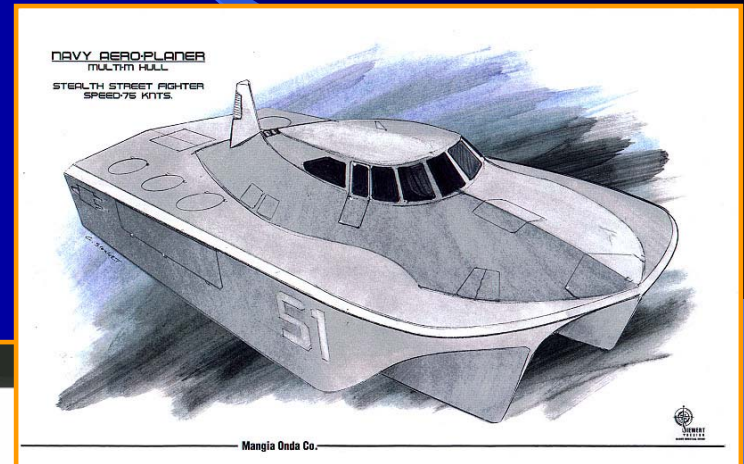
- Higher Speed Potential
- Wake Measurements
- Shock Mitigation
- Load Sensitivity



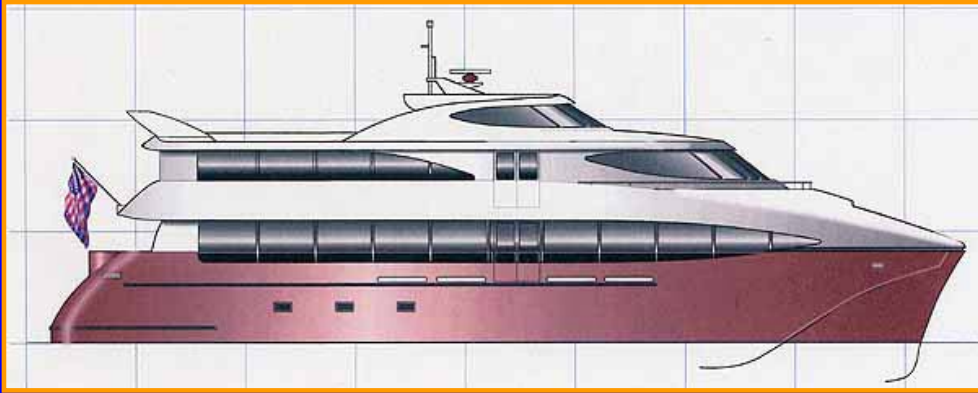
Patrol Boats



Military Vessels



Fast Ferries



The M-Hull



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